

## WET LAB, P20.3

Ventilation in the wet laboratories needs to have negative air pressure compared to surrounding space. The evidence vault should also be a negative pressure area. See below for general guidelines for ventilation system and hoods:

### 3.0 LABORATORY SAFETY EQUIPMENT

#### 3.1 GENERAL VENTILATION SYSTEM

Engineering controls start with the general ventilation system, which should have air intakes and exhausts located so as to avoid intake of contaminated air. This system should provide a source of air for breathing and for input to local ventilation devices. It should not be relied on for protection from toxic substances released into the laboratory. The system should ensure that laboratory air is continually replaced, preventing increase of air concentrations of toxic substances during the working day, and direct air flow into the laboratory from non-laboratory areas and out to the exterior of the building. Thus, air pressure in the laboratories should be negative with respect to the rest of the building. Also, air intakes for a laboratory building should be located in such a way that reduces the possibility that the input air will be contaminated by exhaust air.

#### 3.2 HOODS

The fume hood is the primary engineering control in the lab. A laboratory hood with adequate hood space should be provided as needed. Each hood should have a continuous flow monitoring device. Other local ventilation devices include ventilated storage cabinets and canopy hoods. These should be properly installed and maintained.

Chemical fume hoods capture, contain, and expel emissions generated by hazardous chemicals. In general, it is good laboratory practice to conduct chemical procedures in a fume hood. While you may be able to predict the release of undesirable or hazardous effluents, in some laboratory operations “surprises” can always happen. Placing a chemical reaction or operation inside the hood, especially with the hood sash closed, also places a physical barrier between laboratory personnel and the chemical reaction. This barrier can provide significant protection from chemical splashes or sprays, fires and minor explosions. Therefore, the fume hood offers an extra measure of protection.

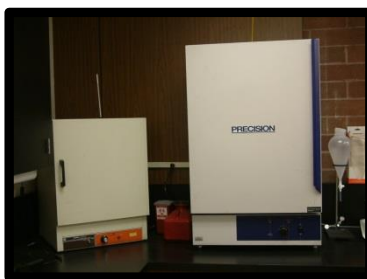
Any alteration of the ventilation system should be made only if thorough testing indicates that worker protection from airborne toxic substances will continue to be adequate.

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**FUME HOOD**



**OVENS**



**CYVAC FUMING CHAMBER**

#### EQUIPMENT

- (2) Fume Hoods: (1) full-size Labconco and (1) full-size Kem Ponent, both average 97 FPM.
- Cyvac Fuming chamber
- (2) Ovens
- Fuming Tank

Built-in cabinets with oversized sinks for rinsing long arms are needed.